

Publication	Image	Claims	Description	Favorite	Download (IMG)
Granted	Image	Claims	Description	Favorite	Download (IMG)

Bibliographic Data:

Title: CPR device having structure for increasing duration and magnitude of negative intra-thoracic pressure

Application Number: 96193712 **Application Date:** 1996.02.16

Publication Number: 1183731 **Publication Date:** 1998.06.03

IPC: A62B7/00;A62B9/02

Applicant: CPRX Corp.

Inventor: Keith G. Lurie; Michael Sweeney

Priority Information: US1995040300919950310

[MT] The patent refers to the field of 'individual breathing masks or apparatus'. This invention **Abstract:** to have, prevent gas from flow structural CPR device, this structural form is put in face mask (52) or that in the breathing tube (36) or and their in-line limit flow-off (50) or pressure reaction threshold (24).

Legal Status:

Legal Status Publication Date: 1998.06.03

Legal Status: publication

Legal Status Publication Date: 1998.06.10

Legal Status: initiative for request of examination as to substance

Legal Status Publication Date: 2002.08.14

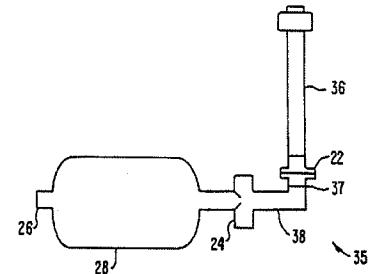
Legal Status: granted

Legal Status Publication Date: 2003.01.29

Legal Status: change in the name or address of the patentee

Legal Status Publication Date: 2003.10.29

Legal Status: change in the name or address of the patentee



1) Family number: 30336996 (US2002069878A)

Title: Apparatus and methods for enhancing cardiopulmonary blood flow and ventilation

Abstract:

Source: US2002069878A According to the invention, methods and devices for increasing cardiopulmonary circulation induced by chest compression and decompression when performing cardiopulmonary resuscitation are provided. According to one method, a pressure responsive inflow valve is coupled to a patient's airway. Chest compressions and chest decompressions are performed. During chest decompression the inflow valve prevents respiratory gases from entering the lungs until a certain negative intrathoracic pressure level is exceeded at which time the one inflow valve opens. In this way, the inflow valve assists in increasing the magnitude and duration of negative intrathoracic pressure during decompression to enhance the amount of blood flow into the heart and lungs. Further, the patient is supplied with a pressurized respiratory gas through the inflow valve when the inflow valve opens to ventilate the patient.

International class (IPC 8-9): A01K1/01 A61B5/00 A61B5/02 A61B5/021 A61B5/08 A61B5/083 A61B5/087 A61B5/145 A61H31/00 A61H31/02 A61M16/00 A61M16/04 A61M16/06 A61M16/20 A61N1/36 A61N1/372 A62B18/02 A62B18/10 A62B7/00 A62B7/04 A62B7/10 A62B9/00 A62B9/04 C09K5/04 F25B31/00 F25B9/00 F25B9/02 G04F5/02 G09B15/00 G09B23/28 (Advanced/Invention); A61M16/00 A61M16/08 A61M16/20 (Advanced/Non-invention); A01K1/01 A61B5/00 A61B5/02 A61B5/08 A61B5/145 A61H31/00 A61M16/00 A61M16/04 A61M16/06 A61M16/20 A61N1/36 A61N1/372 A62B18/00 A62B7/00 A62B7/10 A62B9/00 C09K5/00 F25B31/00 F25B9/00 F25B9/02 G04F5/00 G09B15/00 G09B23/00 (Core/Invention); A61M16/00 A61M16/08 A61M16/20 (Core/Non-invention)

International class (IPC 1-7): A01K1/015 A01K29/00 A61B5/00 A61B5/021 A61B5/08 A61B5/145 A61H1/00 A61H31/00 A61H31/02 A61M15/00 A61M15/00 A61M16/00 A61M16/04 A61M16/06 A61M16/20 A61N1/36 A62B18/02 A62B18/02 A62B18/02 A62B18/10 A62B37/00 A62B7/00 A62B7/00 A62B7/00 A62B7/04 A62B7/10 A62B9/00 A62B9/02 A62B9/06 A62B9/06 A62B9/06 A62B9/2 C09K5/04 F16K31/26 F25B9/00 G04F5/02

European class: A01K1/012 A61H31/00 A61H31/00H2 A61M16/00 A61M16/00H A61M16/04 A61M16/06 A61M16/20 A61M16/20B C09K5/04B2 F25B31/00B2 F25B9/00B4 F25B9/02 G09B23/28W K61H201/12C K61H201/30 K61H201/50C K61H201/50F12 K61H201/50S K61H201/50S2 K61H201/50S8 K61H201/50W K61H230/20D K61H230/42 K61H31/00A2 K61M16/00A10 K61M16/00A11 K61M16/00A14B2 K61M16/00A8B2 K61M16/00M11 K61M16/00M9 K61M16/04 K61M16/06 K61M16/06S K61M16/08A7 K61M16/08D2 K61M16/08D4 K61M16/10F2A K61M16/10F2B K61M16/20A2 K61M16/20B K61M230/06 K61M230/20D K61M230/20P K61M230/30 K61M230/42 K61M230/43C K61M230/50

US class: 119/166 128/200.11 128/200.24 128/202.28 128/202.29 128/203.11 128/204.18 128/204.180 128/204.23 128/204.230 128/204.26 128/204.28 128/205.13 128/205.24 128/205.240 128/205.25 128/206.15 128/206.21 128/207.12 128/207.15 128/207.16 252/67 600/323 600/484 600/485 600/532 601/44 607/15 607/42 62/114 84/484

Family:

Publication number	Publication date	Application number	Application date
AT240758 E	20030615	AT19940901822T	19941107
AU199510918 A1	19950529	AU19950010918	19941107
AU199649257 A1	19961002	AU19960049257	19960216
AU200149233 A5	20011003	AU20010049233	20010316
AU2002308587 BB	20080110	AU20020308587	20020501
AU687942 B2	19980305	AU19950010918	19941107
BRPI0109401 A	20041228	BR2001PI09401	20010316
CA2134639 AA	19950510	CA19942134639	19941028
CA2174778 AA	19950518	CA19942174778	19941107
CA2174778 C	20051227	CA19942174778	19941107
CA2176033 AA	19950518	CA19942176033	19941102
CA2176033 C	20060103	CA19942176033	19941102
CA2214887 AA	19960919	CA19962214887	19960216
CA2214887 C	20080729	CA19962214887	19960216
CA2403816 AA	20010927	CA20012403816	20010316
CA2447013 AA	20021121	CA20022447013	20020501
CA2523847 AA	20041111	CA20042523847	20040420
CN1089012 C	20020814	CN19961093712	19960216
CN1183731 A	19980603	CN19961093712	19960216
CN1518470 A	20040804	CN20028012559	20020501
CN1829548 A	20060906	CN200480017342	20040420
DE69432708 D1	20030626	DE19946032708	19941107
DE69432708 T2	20040311	DE19946032708T	19941107
DE69627898 D1	20030605	DE19966027898	19960216
DE69627898 T2	20040311	DE19966027898T	19960216
EP0728028 A1	19960828	EP19950901822	19941107
EP0728028 A4	19970604	EP19950901822	19941107
EP0728028 B1	20030521	EP19950901822	19941107
EP0739401 A1	19961030	EP19950900500	19941102
EP0739401 A4	19961218	EP19950900500	19941102
EP0898485 A1	19990303	EP19960905523	19960216
EP0898485 A4	19990512	EP19960905523	19960216
EP0898485 B1	20030502	EP19960905523	19960216
EP1337292 A2	20030827	EP20010922429	20010316
EP1387714 A1	20040211	EP20020769675	20020501
EP1387714 A4	20040915	EP20020769675	20020501
EP1617798 A2	20060125	EP20040760311	20040420
ES2199976 T3	20040301	ES19950901822T	19941107
JP10507211 T2	19980714	JP19950513869T	19941102
JP2004509654 T2	20040402	JP20010568295T	20010316
JP2004532681 T2	20041028	JP20020589085T	20020501
JP2006524543 T2	20061102	JP20060513187T	20040420
JP3672922 B2	20050720	JP19950513953T	19941107
JP9508811 T2	19970909	JP19940513953T	19941107
US2002069878 AA	20020613	US20010854238	20010511
US2002170562 AA	20021121	US20020119203	20020408
US2003037794 AA	20030227	US20020224263	20020819
US2003192547 AA	20031016	US20030396007	20030324
US2004016428 A9	20040129	US20020224263	20020819
US2004200474 AA	20041014	US20040765318	20040126

US2004211416 AA	20041028	US20030460558	20030611
US2004211417 AA	20041028	US20030660462	20030911
US2004231664 AA	20041125	US20040796875	20040308
US2005165334 AA	20050728	US20050034996	20050112
US2005199237 AA	20050915	US20030401493	20030328
US2007277826 AA	20071206	US20070690065	20070322
US5372095 A	19941213	US19930149240	19931109
US5441658 A	19950815	US19930149203	19931109
US5551420 A	19960903	US19930149204	19931109
US5692498 A	19971202	US19950403009	19950310
US6062219 A	20000516	US19970950702	19971015
US6425393 BA	20020730	US19900386868	19990831
US6526973 BA	20030304	US20000546252	20000410
US6604523 BB	20030812	US20010854238	20010511
US6986349 BB	20060117	US20020224263	20020819
US7082945 BB	20060801	US20030660462	20030911
US7174891 BB	20070213	US20030396007	20030324
US7185549 BB	20070306	US20030460558	20030611
US7195012 BB	20070327	US20030426161	20030428
US7195013 BB	20070327	US20040765318	20040126
US7204251 BB	20070417	US20030401493	20030328
US7210480 BB	20070501	US20020119203	20020408
WO0170092 A2	20010927	WO2001US08505	20010316
WO0170092 A3	20020919	WO2001US08505	20010316
WO02092169 A1	20021121	WO2002US14039	20020501
WO02092169 C2	20040422	WO2002US14039	20020501
WO04096109 A2	20041111	WO2004US12294	20040420
WO04096109 A3	20051229	WO2004US12294	20040420
WO9513108 A1	19950518	WO1994US12870	19941107
WO9513334 A1	19950518	WO1994US12560	19941102
WO9628215 A1	19960919	WO1996US02097	19960216

Priority:

US19930149204 19931109	US19930149203 19931109	US19930149240 19931109
WO1994US12560 19941102	WO1994US12870 19941107	WO1996US02097 19960216
US1990386868 19990831	US19970950702 19971015	US19950403009 19950310
US20030396007 20030324	US20000546252 20000410	US20020224263 20020819
US20030660462 20030911	US20030460558 20030611	US20030426161 20030428
US20030401493 20030328	WO2002US14039 20020501	US20010854238 20010511
US20020119203 20020408	US20000532601 20000322	WO2001US08505 20010316
US20040765318 20040126	US20040796875 20040308	US20050034996 20050112
WO2004US12294 20040420	US20070690065 20070322	

Cited documents:

US2003062041, US5016627, US6174295, WO9628215, US5014698, US4807638, US6010470, US5704346, US6312399, US5823185, US6165105, WO0024447, US3815606, US5184620, US6483327, US3515163, US5551420, US6155257, US5730122, US5657751, US1848232, US6587726, US5355879, US4898166, US4297999, RU907054, WO0170092, US5738637, US5557049, US4298023, US6356785, GB1465127, US4077400, US4397306, US2004211415, US4259951, US5305743, US2005126567, GB1336892, US5263476, US6938618, US4449526, US2005267381, US6776156, RU1054400, WO9118638, US4827935, US5211133, US3523529, US2002170562, US4971042, US2003000526, WO9513108, US4588383, RU1089099, EP0367285, US5454779, US6792947, US4077404, US5042500, US6486206, US2003062040, US5183038, US5618665, US5193544, US5782883, WO2092169, US5492115, US5984909, US5359998, US5217006, US4817560, US5517986, US3357426, US5119825, US4320754, US2002069878, US6234985, US3191596, US4166458, US5492116, US5735876, US2001029399, RU379603, RU637417, US2004200474, US4481938, US2774346, US5239988, US5697364, US6935336, US5056505, US5722963, US4771731, WO9426229, US3794043, US6578574, US4602653, US3459216, US5549106, US5474533, EP0029352, WO9963926, US4325325, US2954581, US6662032, US4316458, RU627154, EP0509773, EP0271989, CA668771, US5235970, US5988166, US3796188, US3420232, US4928674, US3077884, US5643231, DE2453490, US4505226, US5398714, RU918298, US6863656, US6425393, US5377671, US5109840, US5628305, US4095590, US5919210, US6526973, US5392774, US3933171, US4446864, US549581, WO9528193, US2003192547, US4809683, US4041943, US5301667, US5632298, US5588422, US6883656, US4037595, US1325667, US5496257, EP0139363, US6062219, US6459933, US2005165334, US6615257, US6463327, US604523, US5814086, CA2077608, US3669108, US3834383, WO0170332, RU565052, US6277107, US200307784, RU5692498, US4971051, US6001085, US3307541, US4349015, US2005199237, US2004200473, US2004211416, US2004231664, GB2139099, US5050593, US5678535, US2005217677, US4601465, US5645522, US2774121, US6656166, US2004211417, EP0411714, US3993059, US4881527, US3973564, US5163424, US4598706, US5316907, US4226233, US5827893, EP0245142, WO9321982, US3662751, US4862830, US4533137, US5896857, US5423772, WO9005518, US6078834, US6224562, US6986349, US5617844, US5388575, US4237872, US5614490, US6631716,

Assignee(s): (std):

ADVANCED CIRCULATION SYSTEM CO ; ADVANCED CIRCULATION SYSTEM CORP ; ADVANCED CIRCULATORY SYSTEMS I ; ADVANCED CIRCULATORY SYSTEMS INC ; ALLBROOK DEVELOPMENTS LTD ; APD CRYOGENICS INC ; BARBARA GOLD ; CPRX CORP ; CPRX INC ; CPRX LLC ; CPRX LLC A MINNESOTA CORP ; GOLD BARBARA ; KEITH G LURIE ; LURIE KEITH G ; MCKNITE SCOTT ; MICHAEL SWEENEY ; SWEENEY MICHAEL ; TODD M ZIELINSKI ; ZIELINSKI TODD M ; B GOLD ; BARBARA GOLD ; BOYARSKY MIKHAIL ; DOWLING EARL ; GOLD B ; GOLD BARBARA ; HUMMELLE TODD ; HUMMELLE TODD

Assignee(s):

IGC APD CRYOGENICS INC ; IGC POLYCOLD SYSTEMS INC ; HELIX POLYCOLD SYSTEMS INC ; HELIX TECHNOLOGY CORP ; CPRX LLC A MINNESOTA CORPORATION ; CPRX INC LURIE KEITH G

Inventor(s): (std):

KEITH G LURIE ; KLUISMIER LARRY ; LURIC K G ; LURIE G ; LURIE KEITH G ; M SWEENEY ; MCKNITE SCOTT ; MICHAEL SWEENEY ; MOGORYCHNY VICTOR I ; SCHARENBROICH GENE ; SCOTT LURIE KEITH G MCKNITE ; SWEENEY M ; SWEENEY MICHAEL ; TODD M ZIELINSKI ; VOELCKEL WOLFGANG ; YUDIN BORIS ; ZIELINSKI TODD ; ZIELINSKI TODD M ; B GOLD ; BARBARA GOLD ; BOYARSKY MIKHAIL ; DOWLING EARL ; GOLD B ; GOLD BARBARA ; HUMMELLE TODD ; HUMMELLE TODD

Inventor(s):

K G LURIC ; GENE SCHARENBROICH

Agent(s):

TOWNSEND AND TOWNSEND AND CREW, LLP

Designated states:

AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX NA NE NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW